EXPRESS MAIL #EV737752047US

AMENDMENT TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently amended) A device for dissolving a solid chemical substance (10) with water so as to obtain an aqueous solution; the device comprising:

a container (2), which has a collecting portion (6) for containing the aqueous solution, and a loading chamber (9), which is set above the collecting portion (6), is designed to contain the solid chemical substance (10) and is provided with supporting means (11), designed to support the solid chemical substance (10), and water-dispersion means (18) for directing at least one first jet of water on said solid chemical substance (10); the device (1) being characterized in that

wherein the water-dispersion means (18) are arranged within the loading chamber (9) above the supporting means (11) and are designed to direct the first jet of water in at least one of only laterally and for downwards so as to wet the solid chemical substance (10) set at the bottom and/or laterally with respect to the water-dispersion means (18) themselves.

2. (Currently amended) The device according to Claim 1, in which the loading chamber (9) has a dissolving portion (16) where, in use, the solid chemical substance (10) is dissolved by the first jet of water, and a storage portion (17), which is set above the dissolving portion (16) and is designed to contain the solid chemical substance (10) above the dissolving

-2-

portion (16) itself; the dissolving portion (16) having a top end; the water-dispersion means (18) being arranged in the loading chamber (9) at the top end of the dissolving portion (16).

- 3. (Currently Amended) The device according to Claim 1-or Claim 2, in which the loading chamber (9) comprises means for lateral containment (12), which are designed to support the solid chemical substance (10) laterally.
- 4. (Currently amended) The device according to Claim 3, in which the lateral-containment means (12) are permeable to liquids.
- 5. (Currently Amended) The device according to any one of the preceding claims

 Claim 1, in which said supporting means (11) are permeable to liquids.
- 6. (Currently Amended) The device according to any one of the preceding claims

 Claim 1, and comprising mixing means (8, 28) which are arranged in a position corresponding to the collecting portion (6) and are designed to maintain the aqueous solution stirred.
- 7. (Currently amended) The device according to Claim 6, in which said mixing means (8, 28) comprise spraying means (28) for emitting at least one second jet of water.
- 8. (Currently Amended) The device according to Claim 6 or Claim 7, in which said mixing means (8, 28) comprise at least one mechanical stirrer (8).

9. (Currently Amended) The device according to any one of the preceding claims

<u>Claim 1</u>, and <u>further</u> comprising:

supplying means (3) for supplying the water within the container (2); drainage means (4) for supplying the aqueous solution from the container (2) outwards; and a control unit (37) for actuating the drainage means (4).

- 10. (Currently amended) The device according to Claim 9, in which the drainage means (4) are designed to supply the aqueous solution to an external circuit, in particular a swimming pool; the device comprising first concentration-sensing means (36) for detecting the concentration of solute in the aqueous solution of the external circuit; the control unit (37) being connected to the first concentration-sensing means (36) and being designed to actuate the drainage means (4) so as to maintain the concentration of the chemical substance in the aqueous solution within the collector between a maximum concentration and a minimum concentration.
- Claim 1, and comprising supplying means (3) for supplying the water to the container (2), drainage means (4) for taking the aqueous solution from the container (2), level-detection means (20) for detecting the level of the aqueous solution within the collecting portion (6), a control unit (37) for controlling the supplying means (3), which is connected to the level-detection means (20) so as to maintain the level of the aqueous solution within the container (2) substantially between a maximum level and a minimum level.

- 12. (Currently amended) The device according to Claim 11, and comprising a safety unit (22), which is connected to the control unit (37) and is designed to detect a safety level of the aqueous solution within the collecting portion (6) and to arrest the supplying means (3) when the aqueous solution reaches said safety level; the safety level being higher than the maximum level.
- 13. (Currently Amended) The device according to Claim 11-or Claim 12, and comprising sensor means (23a) designed to detect a level of arrest of the aqueous solution within said collecting portion (6); the level of arrest being lower than said minimum level; in use, when said sensor means (23a) detect said level of arrest, said drainage means (4) being arrested.
- 14. (Currently Amended) The device according to any one of Claims 11 to 13 Claim 11, and comprising shielding means (38) for shielding said level-detection means (20) from the wave motion of the aqueous solution.
- 15. (Currently Amended) The device according to any one of Claims 11 to 14 Claim 11, and comprising second concentration-sensing means (36a), which are connected to the control unit (37) and are designed to detect the concentration within the collecting portion (6).
- 16. (Currently Amended) The device according to any one of the preceding claims

 Claim 1, in which said water-dispersion means (18) comprise a spraying head (19).

Application No.: PCT/IT2004/000015
Preliminary Amendment

EXPRESS MAIL #EV737752047US

17. (Currently Amended) The device according to any one of the preceding claims

Claim 1, and comprising an air valve (39) for releasing the gases which develop during

dissolution of said solid chemical substance (10) outside said container (2).

18. (Currently Amended) The device according to any one of the preceding claims

Claim 1, in which the container (2) comprises an overflow pipe (TP), which is arranged above the collecting portion (6) and is designed to prevent the aqueous solution from overflowing from the container (2) itself.